7.0 NATURAL GAS SUPPLY

Gas that serves California is produced in the Western Canadian Sedimentary Basin in Alberta and British Columbia, the San Juan Basin (the New Mexico and Colorado parts of the Four Corners area), the Permian Basin (west Texas), and the Rocky Mountains (southwestern Wyoming).

Approximately 7 billion cubic feet (Bcf) of natural gas can reach California each day through existing interstate pipelines that bring gas from the producing basins to the state line. More than half of this gas is from the San Juan and Permian Basins. Interstate pipelines interconnect with California's local gas distribution companies. Approximately 1 Bcf of additional natural gas is produced within various portions of the Sacramento Valley, San Joaquin Valley, and Southern California.

Interstate pipelines, including El Paso Natural Gas, Transwestern, Kern River Gas Transmission, Pacific Gas Transmission, and Mojave, transport gas from producing basins to the state line.[1] Local distribution companies, such as Pacific Gas and Electric Company (PG&E) and Southern California Gas Company (SoCalGas), transport gas from the state line to customers. Transportation services are regulated by the California Public Utilities Commission (CPUC).

Natural gas for the Tracy Peaker Project (TPP) would be obtained from PG&E's Line 401 natural gas transmission pipeline that crosses beneath the TPP site from northwest to southeast. A 16-inch-diameter pipeline would be constructed from the PG&E pipeline tap point to the point of use on the site. This section describes the proposed natural gas pipeline route, gas quality, the pipeline construction methods, the pipeline operating procedures, and the permits needed.

[1] Kern River and Mojave are actually interstate pipelines that cross the state line and deliver gas directly to customers in the southern San Joaquin Valley, near Bakersfield. They are the only interstate pipelines that currently operate within California.

7.1 The Proposed Route

No offsite route is required, as the PG&E gas line crosses beneath the site. The gas line is shown in Figure 2-2 in Section 2.0 (Project Description).

In addition to the direct natural gas supply line to the TPP, PG&E may implement other system improvements in the area to enhance the reliability of gas service to its customers.

7.2 Alternative Routes

No alternative routes for the natural gas pipeline are required, as the tap point would be located on the plant site.

7.3 Gas Quality

Gas delivered through intrastate pipelines must conform to certain quality specifications approved by the CPUC. Gas delivered to the TPP will conform to the quality standards shown in Table 7-1.

7.4 Construction Practices

As the tap point would be located on the plant site, no offsite route is required.

7.5 Pipeline Operations

As the tap point would be located on the plant site, no offsite route is required. The transported gas would be odorized as it is received from the PG&E transmission pipeline. Isolation block-valves would be installed at both ends of the onsite supply pipeline. These valves would be manually controlled, lockable, gear-operated ball valves. PG&E would have access to the isolation block-valve at the mainline tap, and the TPP operators alone would have access to the downstream isolation ball valve on the TPP site. PG&E would own and operate a metering facility to measure the gas supply to the TPP.

7.6 Permits

No permit is required, as the tap point is within the boundaries of the facility.

TABLES

Table 7-1
Quality Standards for Natural Gas

Constituent	Volume %
Oxygen	0.000
Methane	90.848
Ethane	3.494
Nitrogen	3.256
Carbon dioxide	1.901
Propane	0.362
n-Butane	0.063
i-Butane	0.076
Iso Pentane	0.000
n-Pentane	0.000
C6+	0.000
Total sulfur	< 0.22 grains sulfur per 100 SCF
TOTAL	100.00
Heating Value	1002.8 Btu/SCF (HHV)

Source: Tracy Biomass Plant Natural Gas Analysis: incoming valve assembly gas chromatograph. Provided by Mark Kehoe, GWF Energy LLC.

Btu = British thermal units
SCF = standard cubic feet
HHV = higher heating value